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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,231	03/10/2004	Richard Hammond	ASC-057C1 2980	
51414 GOODWIN PR	7590 03/26/200 ROCTER LLP	EXAMINER		
PATENT ADM		GHYKA, ALEXANDER G		
53 STATE STR EXCHANGE P		ART UNIT	PAPER NUMBER	
BOSTON, MA	02109-2881	2812		
			NOTIFICATION DATE	DELIVERY MODE
			03/26/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
10/797,231	HAMMOND ET AL.	
For a modern and	A 4 11 14	
Examiner	Art Unit	

	ALEXANDER G. GHYKA	2812	
The MAILING DATE of this communication appe	ars on the cover sheet with the c	correspondence add	ress
THE REPLY FILED <u>06 March 2009</u> FAILS TO PLACE THIS AP	PLICATION IN CONDITION FOR	ALLOWANCE.	
1. The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following application in condition for allowance; (2) a Notice of Apperfor Continued Examination (RCE) in compliance with 37 C periods:	replies: (1) an amendment, affidavireal (with appeal fee) in compliance	t, or other evidence, w with 37 CFR 41.31; or	hich places the (3) a Request
a) The period for reply expires 3 months from the mailing date b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire la Examiner Note: If box 1 is checked, check either box (a) or (MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f Extensions of time may be obtained under 37 CFR 1.136(a). The date of	dvisory Action, or (2) the date set forth ster than SIX MONTHS from the mailing b). ONLY CHECK BOX (b) WHEN THE).	g date of the final rejection FIRST REPLY WAS FI	on. LED WITHIN TWO
have been filed is the date for purposes of determining the period of ext under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the s set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL	ension and the corresponding amount of hortened statutory period for reply origi	of the fee. The appropria nally set in the final Office	ate extension fee e action; or (2) as
 The Notice of Appeal was filed on A brief in comp filing the Notice of Appeal (37 CFR 41.37(a)), or any exter Notice of Appeal has been filed, any reply must be filed wi AMENDMENTS 	nsion thereof (37 CFR 41.37(e)), to	avoid dismissal of the	
The proposed amendment(s) filed after a final rejection, because it is a final rejection, because the final rejection, because the final rejection, because it is a final rejection in beta final rejection.	nsideration and/or search (see NOTw);	ΓE below);	
appeal; and/or (d) They present additional claims without canceling a converse NOTE: (See 37 CFR 1.116 and 41.33(a)).	corresponding number of finally reje	ected claims.	
4. The amendments are not in compliance with 37 CFR 1.12 5. Applicant's reply has overcome the following rejection(s):		mpliant Amendment (PTOL-324).
6. Newly proposed or amended claim(s) would be all non-allowable claim(s).	·	•	_
7. For purposes of appeal, the proposed amendment(s): a) [how the new or amended claims would be rejected is prov The status of the claim(s) is (or will be) as follows: Claim(s) allowed:		I be entered and an e	xplanation of
Claim(s) objected to: Claim(s) rejected: Claim(s) withdrawn from consideration:			
AFFIDAVIT OR OTHER EVIDENCE 8. ☐ The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).			
9. The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to o showing a good and sufficient reasons why it is necessary	vercome <u>all</u> rejections under appea	al and/or appellant fail	s to provide a
10.	n of the status of the claims after er	ntry is below or attach	ed.
 The request for reconsideration has been considered but <u>See Continuation Sheet.</u> 	, , , , ,	condition for allowan	ce because:
12.	PTO/SB/08) Paper No(s)		
	/Alexander G. Ghyka/ Primary Examiner, Art U	nit 2812	

Continuation of 11. does NOT place the application in condition for allowance because: Applicants argue that while Hellberg does disclose the fact that SiGe may be oxidized, the Examiner does not explain the basis for his contention that this is a "known benefit" justifying an obviousness rejection. Applicants argue that one of skill in the art would not combine the oxidation process of Hellberg with Ismail and Chang, because Hellberg's process is more time consuming than Chang's chemical etching and results in deleterious interdiffusion and Ge contamination. The Examiner maintains that one of ordinary skill in the art would recognize that different oxidation processes would have different pros and cons, and maintains that the use of a known oxidation process for its benefit of oxidation would have been obvious to one of ordinary skill in the art. Applicants argue that one of ordinary skill in the art, wishing to remove SiGe, would clearly prefer the faster method of Chang, particularly since Hellberg's method also involves temperatures vastly higher than Chang's temperatures. The Examiner maintains that even though one method is faster than another, the use of a known method for its known benefit does not constitute a patentable difference. Applicants further argue that the Ge interdiffusion would make the device inoperable. The Examiner maintains that there is no evidence of record which shows the device to be inoperable.

With respect to Claim 43, Applicants argue that the Examiner again ignores the fact that Ismail himself teaches against the formation of a MOSFET, and ignores the fact that Ismail discloses that the MOSFET is an inferior device. The Examiner maintains that the fact that the MOSFET is an unpreferred embodiment does not constitute a patentable difference.

With respect to Claim 45, Applicants argue that while Ismail does disclose a surface channel device and a buried channel device in Claim 7, these devices have channels in different layers of Ismail's structure, whereas the present claim requires that both channels are disposed in a single semiconductor layer. The Examiner notes that in Figure 7, the strained semiconductor layer comprises portions of the two channel areas.

With respect to Claims 41 and 43, Applicants argue that Ismail teaches against using the MOSFET. The Examiner maintains that the use of an unpreferred device does not constitute a patentable difference and maintains that the cited prior art suggests the interchangeability of MOSFETs and MODFETs. With respect to Claims 42, 44, 46-54 and 56-73, Applicants again argue the inferior electrical performance of the MOSFET. The Examiner maintains for the reasons as discussed above.

With respect to Claim 60, Applicants argue that one of ordinary skill in the art could not simply remove this layer (the SiGe layer partially missing in Fig. 7 is required- it is this layer that functions as the channel of his P-MODFET device) and then fabricate a device having p-type doped source and drain regions, as the SiGe channel layer, from which this device derives its enhanced performance would be missing. The Examiner notes that the SiGe layer is selectively removed from the N-MODFET.

/Alexander G. Ghyka/

PRIMARY EXAMINER AU 2812